

INTRODUCTION

This book as a textbook for students of higher educational institutions, is a new edition, expanded significantly and substantially recycled textbook “Measuring converters”, published Ye. S. Polishchuk in 1981 by the publishing house “High School”. The book contains information on current transducers and sensors of various types, and supplemented by data on microsensors, unified transducers and actuators that are used for building measurement and information systems for different purposes makes the book most convenient for independent studies of students of all learning.

The main focus of the tutorial is on the principles of transducers and sensors and their management to monitor and measure physical quantities.

The textbook consists of two parts. In the first set of general questions of theory and discussed the physical basis of the various types of primary converters. The second part contains the principles of measurement data collection systems. And information about standardized and reverse converters used in measuring transducers and measurement and information systems.

When writing a textbook used long experience lecturer at the Lviv Polytechnic National University of the latest advances in measurement technology both in Ukraine and abroad.

The authors gratefully accept criticisms and suggestions, which should be sent to: Lviv Polytechnic National University, Department of Metrology, Standardization and Certification, St. Bandera, 12, Lviv, 79013, Ukraine.

This tutorial is dedicated to the memory of long-term employee of the department of Information and measuring technologies, the former head of her – Professor Ye. S. Polishchuk.